

January 28, 2008

Mr. Roger Gross Merestone Consultants, Inc. 19633 Blue Bird Lane, Ste 7 Rehoboth Beach, DE 19971

RE: PLUS review – 2007-12-01; Batson Creek Estates

Dear Mr. Gross

Thank you for meeting with State agency planners on January 2, 2008 to discuss the proposed plans for the Batson Creek Estates project to be located on Bayard Road, approximately 1800 ft. northwest of Zion Church Road.

According to the information received, you are seeking site plan approval for 110 residential units on 55.2 acres located in Level 4.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as Sussex County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.

This proposal is located in Investment Level 4 according to the *Strategies for State Policies and Spending*, and is within the Low Density area according to the Sussex County certified comprehensive plan. The comments in this letter are technical, and are not intended to suggest that the State supports this development proposal. This letter does not in any way suggest or imply that you may receive or may be entitled

to permits or other approvals necessary to construct the development you indicate or any subdivision thereof on these lands.

The following are a complete list of comments received by State agencies:

Office of State Planning Coordination - Contact: David Edgell 739-3090

This project represents a major land development that will result in 110 residential units in an Investment Level 4 area according to the 2004 Strategies for State Policies and Spending. This proposal is located in Investment Level 4 according to the Strategies for State Policies and Spending, and is within the Low Density area according to the Sussex County certified comprehensive plan. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4 areas. These areas are comprised of prime agricultural lands and environmentally sensitive wetlands and wildlife habitats, which should be, and in many cases have been preserved.

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. The project as proposed is likely to bring more than 260 new residents to an area where the State has no plans to invest in infrastructure upgrades or additional services. These residents will need access to such services and infrastructure as schools, police, and transportation. To provide some examples, the State government funds 100% of road maintenance and drainage improvements for the transportation system, 100% of school transportation and paratransit services, up to 80% of school construction costs, and about 90% of the cost of police protection in the unincorporated portion of Sussex County where this development is proposed. Over the longer term, the unseen negative ramifications of this development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

Because the development is inconsistent with the *Strategies for State Policies and Spending*, the State is opposed to this proposed subdivision.

Division of Historical and Cultural Affairs - Contact: Terrance Burns 739-5685

• There did not appear to be no historic or cultural resource sites, no archaeological site, and no listed national register property on this parcel/property, but the developer should be aware that there are a few known historic or cultural resource sites nearby.

- The developer should be aware and remember is that this parcel/property in a Level 4 area. The nature or context of Level 4 areas are often or usually environmentally sensitive areas. The State Historic Preservation Office of the Division of Historical & Cultural Affairs is not in favor of any type of zoning change, construction, building project, or development in Level-4 areas.
- The developer should also be aware that this parcel/property is within the historic vicinity of Baltimore Hundred. According to the historic Beers Atlas/Map of 1868, there is evidence on the atlas/map that indicates that the vicinity of Baltimore Hundred does have some historical areas. The developer should also be aware that it is a possibility that there could potentially be historic or cultural resources on this parcel/property because of the historical background of the area or vicinity. These historic or cultural resources could be archaeological resources such as be a cemetery, burial ground, unmarked human remains, or the parts or pieces or something demolished, destroyed, or ruined historically.
- The State Historic Preservation Office of the Division of Historic & Cultural Affairs recommends the prior to or before any demolition, ground-disturbing activities or construction on this parcel/property that the developer show review Chapters 53 and 54, in Title 7, of the Delaware State Code. Chapter 53 pertains to the discovery and disposition of "Conservation of Archaeological Resources In or On State Lands". Chapter 54 pertains to the "Delaware Unmarked Human Remains Act of 1987", such as the discovery and disposition of Unmarked Human Burials or Skeletal Remains". The unexpected discovery of unmarked human remains during construction can result in significant delays while the process is carried out.
- The State Historic Preservation Office of the Division of Historic & Cultural Affairs also recommends that prior to or before any demolition, ground-disturbing activities, or construction that the developer should consider hiring an archaeological consultant to check or examine parcel/property thoroughly, and see if there is any evidence or indication of potential historic or cultural resources, or archaeological resources on it, such as a cemetery, burial ground, unmarked human remains, or the parts or pieces or something demolished, destroyed, or ruined historically.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

Matthew Brittingham seeks to develop 110 single-family detached houses on a 55.2-acre parcel (Tax Parcel 5-33-11.00-84.00) located on the west side of Bayard Road (Sussex Road 384) north of Delaware Route 20. The land is zoned AR-1 and would be developed under Sussex County's cluster development option.

Because this development is proposed for a Level 4 Area it is inconsistent with the *Strategies for State Policies and Spending*. As part of our commitment to support the *Strategies*, DelDOT refrains from participating in the cost of any road improvements needed to support this development and is opposed to any road improvements that will substantially increase the transportation system capacity in this area. DelDOT will only support taking the steps necessary to preserve the existing transportation infrastructure and make whatever safety and drainage related improvements are deemed appropriate and necessary. The intent is to preserve the open space, agricultural lands, natural habitats and forestlands that are typically found in Level 4 Areas while avoiding the creation of isolated development areas that cannot be served effectively or efficiently by public transportation, emergency responders, and other public services.

DelDOT strongly supports new development in and around existing towns and municipalities and in areas designated as growth zones in approved Comprehensive Plans. We encourage the use of transfer of development rights where this growth management tool is available.

If this development proposal is approved, notwithstanding inconsistencies with the relevant plans and policies, DelDOT will provide further technical review and comments.

<u>The Department of Natural Resources and Environmental Control – Contact: Kevin Coyle 739-9071</u>

Investment Level 4 Policy Statement

This project is proposed for an Investment Level 4 area as defined by the <u>Strategies for State Policies and Spending</u> and is also located outside of a designated growth area in the relevant municipal and County certified comprehensive plans. According to the <u>Strategies</u>, this project is inappropriate in this location. In Investment Level 4 areas, the State's investments and policies, from DNREC's perspective, should retain the rural landscape and preserve open spaces and farmlands. Open space investments should emphasize the protection of critical natural habitat and wildlife to support a diversity of species, and the protection of present and future water supplies. Open space investments should also provide for recreational activities, while helping to define growth areas. Additional State investments in water and wastewater systems should be limited to existing or imminent public health, safety or environmental risks only, with little provision for additional capacity to accommodate further development.

With continued development in Investment Level 4 areas, the State will have a difficult, if not impossible, time attaining water quality (e.g., TMDLs) and air quality (e.g., non-attainment areas for ozone and fine particulates) goals. Present and future investments in

green infrastructure, as defined in Governor Minner's Executive Order No. 61, will be threatened. DNREC strongly supports new development in and around existing towns and municipalities and in areas designated as growth zones in certified Comprehensive Plans. We encourage the use of transfer of development rights where this growth management tool is available.

This particular development certainly compromises the integrity of the State Strategies and the preservation goals inherent in many of DNREC's programs. Of particular concern are potential impacts to wetlands (road crossings, utilities, etc.), the loss/fragmentation of forest (2 out of 13 acres or 15.4%), the project's location in the floodplain, and tax ditch rights-of-way. While mitigating measures such as conservation design, central wastewater systems instead of individual on-site septic systems, and other best management practices may help mitigate impacts from this project, not doing the project at all is the best avenue for avoiding negative impacts. As such, this project will receive no financial, technical or other support of any kind from DNREC. Any required permits or other authorizations for this project shall be considered in light of the project's conflict with our State growth strategies.

Soils

According to the Sussex County soil survey update, Pepperbox-Rosedale complex, Hurlock, Mullica, and Longmarsh were mapped in the immediate vicinity of the proposed construction. Pepperbox-Rosedale complex is a moderately well-drained to well-drained soil with moderate limitations for development. Hurlock, Mullica, and Longmarsh (associated with floodplains) are poorly to very poorly-drained wetland associated (hydric) soils that have severe limitations for development, and should be avoided. Approximately 15-20% of the soils mapped on subject parcel are wetland associated (hydric) soils.

Wetlands

Based on the Statewide Wetland Mapping Project (SWMP) mapping, palustrine forested riparian wetlands were mapped along most of the southern boundary of subject parcel. Additionally, it is likely that some unmapped riparian wetlands may be associated with the Batson Branch ditch bisecting the parcel from north to south.

Impacts to Palustrine wetlands are regulated by the U.S. Army Corps of Engineers (USACE, or "the Corps") through Section 404 of the Clean Water Act. In addition, individual 404 permits and certain Nationwide Permits from the Corps also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Division of Soil and

Water Conservation, Delaware Coastal Management Program (DCMP) Section. Each of these certifications represents a separate permitting process. Please be advised that nationwide permits have been suspended in Delaware and are pending further coordination with the Corps. Therefore, contrary to past practices, Coastal Zone Management approval can no longer be assumed. Individual certifications must be granted from the DCMP office for each project intending to utilize a Nationwide Permit. For more information on the Federal Consistency process, please contact the DCMP office at 302.739.9283. To find out more about permitting requirements, the applicant is encouraged to attend a Joint Permit Process Meeting. These meetings are held monthly and are attended by federal and state resource agencies responsible for wetland permitting. Contact Denise Rawding at (302) 739-9943 to schedule a meeting.

Based on a review of existing buffer research by Castelle et al. (1994), an adequately-sized buffer that effectively protects wetlands and streams, in most circumstances, is about 100-foot in width. In recognition of this research and the need to protect water quality, the Watershed Assessment Section recommends that the applicant maintain/establish a minimum 100-foot upland buffer (planted in native vegetation) from the landward edge of all wetlands and water bodies (including all ditches).

As mentioned previously, a significant portion of this parcel contains poorly to very poorly-drained hydric Hurlock, Mullica, and Longmarsh soils (estimated 15-20%). Hydric soils typically have a seasonal high water table at or near the soil surface (within one-foot of soil surface or less). Building in such soils is likely to leave prospective residents of this and adjoining properties susceptible to future flooding problems from groundwater-driven surface water ponding, especially during extended periods of high-intensity rainfall events such as tropical storms/hurricanes or "nor'easters." This is in addition to increased flooding probabilities from surface water runoff emanating from future created forms of structural imperviousness (roof tops, roads, sidewalks, and stormwater management structures).

Based on the Chapter 99, Section 16A of the Sussex County Code (paraphrased), lands compromised by improper drainage or flooding potential pose significant threats to the safety and general welfare of future residents and, therefore, shall not be developed. Soils mapped as Hurlock, Mullica and Longmarsh fit the criterion for improper drainage or high flooding potential, and should be avoided. The Watershed Assessment Section believes permitting development on such soils would be inconsistent with abovementioned regulatory guidelines in the Sussex County Code.

Impervious Cover

Based on information provided by the applicant in the PLUS application form, the applicant's projected estimate of post-construction surface imperviousness should not exceed 23 percent. However, given the scope and density of this project, this estimate appears to be significant underestimate. The applicant should realize that all forms of constructed surface imperviousness (i.e., rooftops, sidewalks, open-water stormwater management structures, and roads) should be included in the calculation for surface imperviousness - this will ensure a realistic assessment of this project's likely post-construction environmental impacts. Therefore, estimates of the pre and post-development surface imperviousness should be recalculated with all of the above-mentioned concerns included.

Studies have shown a strong relationship between increases in impervious cover to decreases in a watershed's overall water quality. It is strongly recommended that the applicant implement best management practices (BMPs) that reduce or mitigate some of its most likely adverse impacts. Reducing the amount of surface imperviousness through the use of pervious paving materials ("pervious pavers") in lieu of asphalt or concrete in conjunction with an increase in forest cover preservation or additional tree plantings are some examples of practical BMPs that could easily be implemented to help reduce surface imperviousness.

ERES Waters

This project is located adjacent to receiving waters of the Little Assawoman Bay designated as having waters of Exceptional Recreational or Ecological Significance (ERES). ERES waters are recognized as special assets of the State, and shall be protected and/ or restored, to the maximum extent practicable, to their natural condition. Provisions in Section 5.6 of Delaware's "Surface Water Quality Standards" (as amended July 11, 2004), specify that all designated ERES waters and receiving tributaries develop a "pollution control strategy" to reduce non-point sources of pollutants through implementation of Best Management Practices (BMPs). Best

Management Practices as defined in subsection 5.6.3.5 of this section, expressly authorizes the Department to provide standards for controlling the addition of pollutants and reducing them to the greatest degree achievable and, where practicable, implementation of a standard requiring no discharge of pollutants.

TMDLs

Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Little Assawoman watershed. A TMDL is the maximum level of pollution allowed for a given pollutant below which a "water quality limited water body" can assimilate and still meet water quality standards to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. Although TMDLs are required by federal law, states are charged with developing and implementing standards to support these desired use goals. The TMDL nutrient reduction requirements for the Little Assawoman watershed require a 40 percent reduction in nitrogen and phosphorus. Additionally, the TMDL reduction requirement for bacteria is also 40 percent.

Compliance with TMDLs through the Pollution Control Strategy (PCS)

As stated above, Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Little Assawoman watershed. The TMDL calls for a 40% reduction in nitrogen and phosphorus from baseline conditions. Additionally, a 40 percent reduction in bacteria will also be required from baseline conditions. Additional nutrient reductions may be possible through the implementation of Best Management Practices such as wider vegetated buffers along watercourses or ditches, increasing passive, wooded open space, use of pervious paving materials to reduce surface imperviousness, connection to a central sewer (if available), and the use of green-technology stormwater management treatment trains. The Department has developed an assessment tool to evaluate how your proposed development may reduce nutrients to meet the TMDL requirements. Contact Lyle Jones at 302-739-9939 for more information on the assessment tool.

Water Supply

The project information sheets state water will be provided to the project by Artesian Water Company via a public water system. DNREC records indicate that the project is located within the public water service area granted to Artesian Water Company under Certificate of Public Convenience and Necessity 03-CPCN-26.

Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.

All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising.

Should you have any questions concerning these comments, please contact Rick Rios at 302-739-9944.

Sediment and Erosion Control/ Stormwater Management

A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. Contact the reviewing agency to schedule a preapplication meeting to discuss the sediment and erosion control and stormwater management components of the plan as soon as practicable. The site topography, soils mapping, pre- and post-development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. The plan review and approval as well as construction inspection will be coordinated through the Sussex Conservation District. Contact Jessica Watson at the Sussex Conservation District at (302) 856-7219 for details regarding submittal requirements and fees.

Because of the parcel's location in an impaired watershed and the amount of impervious surface, consider incorporating more green technology BMPs and low impact development practices to reduce stormwater flow and to meet water quality goals.

The Sediment and Stormwater Management Program ensures sediment and erosion control plans and stormwater plans comply with local land use ordinances and policies, including the siting of stormwater management facilities. However, DNREC does not support placement in resource protection areas or the removal of trees for the sole purpose of placement of a stormwater management facility/practice.

Floodplain

We appreciate the fact that both the 1% and 0.2% chance flood elevations are shown on the site plan. However, the 1% elevation is very hard to follow. It appears that all the lots would be located outside the 1% chance flood area (100 year floodplain). Is the detention pond located outside the 1% chance flood area? It is recommended that none of these homes have basements as quit a few of them are located in the 0.2% chance flood area (500 year floodplain).

Drainage

This project is located within the Batson Branch Tax Ditch. Continue to work with the DNREC Drainage Program in Georgetown at (302) 855-1930 on the release of stormwater into the Tax Ditch.

In addition:

- Consider future maintenance needs for the private ditch on the western side of the property. Establish a spoil disposal area within the open space to the rear of lots 22-26 and note on the record plan. Adjust the rear lot lines of lots 22 and 23 to allow for 25 feet between the top of the ditch bank and the lot line.
- The Drainage Program requests that the engineer take precautions to ensure the project does not hinder any off site drainage upstream of the project or create any off site drainage problems downstream by the release of on site storm water. The Drainage Program requests that the engineer check existing downstream ditches and pipes for function and blockages prior to the construction. Notify downstream landowners of the change in volume of water released on them.
- The Drainage Program encourages the elevation of rear yards to direct water towards the streets and alleyways where storm drains are accessible for maintenance. However, the Drainage Program recognizes the need for catch basins in yards in certain cases. Therefore, catch basins placed in rear and side yards will need to be clear of obstructions and be accessible for maintenance. Decks, sheds, fences, pools, and kennels can hinder drainage patterns as well as future maintenance to the storm drain or catch basin. Deed restrictions, along with drainage easements recorded on deeds, should ensure adequate future maintenance access.
- An increase of the side yard setback to 15 feet may be needed on all properties with a drainage easement on the side. The increase will allow room for equipment to utilize the entire easement and maneuver free of obstructions if the drainage conveyance requires periodic maintenance or future re-construction. The side yard setback would only increase on the side with the drainage easement.
- All catch basins in rear or side yards should have a 10-foot drainage easement around them on all sides. Place restrictions on fences, sheds, and other structures within the easement to prevent obstructions from being place next to the catch basin. Record the easement on the deed.

Have all drainage easements recorded on deeds and place restrictions on obstructions within the easements to ensure access for periodic maintenance or future re-construction. Future property owners may not be aware of a drainage easement on their property if the easement is only on the record plan. However, by recording the drainage easement on the deed, the second owner, and any subsequent owner of the property, will be fully aware of the drainage easement on their property.

Rare Species

DRNEC has never surveyed this property; therefore, it is unknown if there are State-rare or federally listed plants, animals or natural communities at this project site that would be impacted by project activities. There is a population of State-rare Enneacanthus obesus (banded sunfish), within Dirickson Creek. This species could also occur within Batson Branch as the two systems are connected.

Recommendation:

1. In the interest of water quality and to protect rare species, there should be at least a 100-foot upland buffer left intact along Batson Branch and associated wetlands. The application states that only 25-foot buffers will be left between lot lines and wetlands. This is highly inadequate from a scientific standpoint. We recommend that lots within 100 feet of wetlands be pulled back or omitted from the plan. Cumulative impacts to water quality are a real concern considering the level of development (existing, in-progress, and future) along this water system.

Forest Preservation

DNREC appreciates that the forested area along Batson Branch is going to be left mostly intact and that stormwater facilities will not require tree removal. This is especially important as a Bald Eagle nest occurs downstream and the pair likely utilizes Batson Branch for foraging and roosting. This forested riparian buffer is also important for protecting water quality and providing a wildlife travel corridor. However, in the western portion of the parcel there are nine lots and a road with an 'eyebrow' and cul-de-sac that will require tree removal.

Cumulative forest loss throughout the State is of utmost concern to the Division of Fish and Wildlife which is responsible for conserving and managing the State's wildlife (see www.fw.delaware.gov and the Delaware Code, Title 7). Because of an overall lack of forest protection, DNREC has to rely on applicants and/or the entity that approves the

project (i.e. counties and municipalities) to consider implementing measures that will aide in forest loss reduction.

Recommendations:

- 1) DNREC recommends that lot #s 27-35 be omitted so that tree removal is minimal and a larger area of forest open space can remain for wildlife habitat and travel.
- 2) Trees should not be cleared from April 1st to July 31st to reduce impacts to nesting birds and other wildlife species that utilize forests for breeding. This clearing recommendation would only protect those species during one breeding season; once trees are cleared the result is an overall loss of habitat.

Nuisance Geese

Wet ponds for stormwater management purposes may attract resident Canada geese and mute swans that will create a nuisance for community residents. High concentrations of waterfowl in ponds create water-quality problems, leave droppings on lawn and paved areas and can become aggressive during the nesting season. Short manicured lawns around ponds provide an attractive habitat for these species.

The Division of Fish and Wildlife does not provide goose control services, and if problems arise, residents or the home-owners association will have to accept the burden of dealing with these species (e.g., permit applications, costs, securing services of certified wildlife professionals). Solutions can be costly and labor intensive; however, with proper landscaping, monitoring, and other techniques, geese problems can be minimized.

Recommendation:

1) DNREC recommends plantings of native species of tall grasses, wildflowers, shrubs, and trees at the edge and within an adequate buffer (15-30 feet in width) around the ponds. When the view of the surrounding area from the pond is blocked, geese can't scan for predators and are less likely to congregate and nest in the area of the pond.

At this time, they do not recommend using monofilament grids due to the potential for birds and other wildlife to become entangled if the grids are not properly installed and maintained. In addition, the on-going maintenance (removing entangled trash, etc.) may become a burden to the homeowners association or land manager.

Air Quality

Once complete, vehicle emissions associated with this project are estimated to be 8.4 tons (16,883.9 pounds) per year of VOC (volatile organic compounds), 7.0 tons (13,978.7 pounds) per year of NOx (nitrogen oxides), 5.2 tons (10,313.7 pounds) per year of SO2 (sulfur dioxide), 0.5 ton (918.1 pounds) per year of fine particulates and 706.2 tons (1,412,312.7 pounds) per year of CO2 (carbon dioxide).

However, because this project is in a level 4 area, mobile emission calculations should be increased by 118 pounds for VOC emissions for each mile outside the designated growth areas per household unit; by 154 pounds for NOx; and by 2 pounds for particulate emissions. A typical development of 100 units that is planned 10 miles outside the growth areas will have additional 59 tons per year of VOC emissions, 77 tons per year of NOx emissions and 1 ton per year of particulate emissions versus the same development built in a growth area (level 1, 2 or 3).

Emissions from area sources associated with this project are estimated to be 3.4 tons (6,810.0 pounds) per year of VOC (volatile organic compounds), 0.4 ton (749.3 pounds) per year of NOx (nitrogen oxides), 0.3 ton (621.8 pounds) per year of SO2 (sulfur dioxide), 0.4 ton (802.4 pounds) per year of fine particulates and 13.8 tons (27,606.3 pounds) per year of CO2 (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 1.3 tons (2,699.0 pounds) per year of NOx (nitrogen oxides), 4.7 tons (9,387.8 pounds) per year of SO2 (sulfur dioxide) and 692.4 tons (1,384,706.4 pounds) per year of CO2 (carbon dioxide).

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 1.3 tons of nitrogen oxides per year and 4.7 tons of sulfur dioxide per year.

A significant method to mitigate this impact would be to require the builder to construct Energy Star qualified homes. Every percentage of increased energy efficiency translates into a percent reduction in pollution. Quoting from their webpage, http://www.energystar.gov/:

"ENERGY STAR qualified homes are independently verified to be at least 30% more energy efficient than homes built to the 1993 national Model Energy Code or 15% more efficient than state energy code, whichever is more rigorous. These savings are based on

heating, cooling, and hot water energy use and are typically achieved through a combination of:

building envelope upgrades, high performance windows, controlled air infiltration, upgraded heating and air conditioning systems, tight duct systems and upgraded water-heating equipment."

The DNREC Energy Office is in the process of training builders in making their structures more energy efficient. The Energy Star Program is excellent way to save on energy costs and reduce air pollution. They highly recommend this project development and other residential proposals increase the energy efficiency of their homes.

DNREC also recommends that the home builders offer geothermal and photo voltaic energy options. Applicable vehicles should use retrofitted diesel engines during construction. The development should provide tie-ins to the nearest bike paths, links to mass transit, and fund a lawnmower exchange program for their new occupants.

State Fire Marshal's Office - Contact: Duane Fox 856-5298

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal's Office. At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation:

a. Fire Protection Water Requirements:

- ➤ Where a water distribution system is proposed for single-family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required.
- > The infrastructure for fire protection water shall be provided, including the size of water mains.

b. Accessibility:

- All premises, which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from Bayard Rd. must be constructed so fire department apparatus may negotiate it. If a "center island" is placed at an entrance into the subdivision, it shall be arranged in such a manner that it will not adversely affect quick and unimpeded travel of fire apparatus into the subdivision.
- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
- Any dead end road more than 300 feet in length shall be provided with a turnaround or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
- > The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
- ➤ The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.

c. Gas Piping and System Information:

> Provide type of fuel proposed, and show locations of bulk containers on plan.

d. Required Notes:

- ➤ Provide a note on the final plans submitted for review to read "All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations"
- ➤ Name of Water Supplier
- Proposed Use
- National Fire Protection Association (NFPA) Construction Type
- Townhouse 2-hr separation wall details shall be shown on site plans
- Maximum Height of Buildings (including number of stories)
- Provide Road Names, even for County Roads

Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded

from our website: www.statefiremarshal.delaware.gov, technical services link, plan review, applications or brochures.

Department of Agriculture - Contact: Scott Blaier 698-4500

The proposed development is in an area designated as Investment Level 4 under the *Strategies for State Policies and Spending*. The *Strategies* do not support this type of isolated development in this area. The intent of this plan is to preserve the agricultural lands, forestlands, recreational uses, and open spaces that are preferred uses in Level 4 areas. The Department of Agriculture opposes the proposed development which conflicts with the preferred land uses, making it more difficult for agriculture and forestry to succeed, and increases the cost to the public for services and facilities.

More importantly, the Department of Agriculture opposes this project because it negatively impacts those land uses that are the backbone of Delaware's resource industries - agriculture, forestry, horticulture - and the related industries they support. Often new residents of developments like this one, with little understanding or appreciation for modern agriculture and forestry, find their own lifestyles in direct conflict with the demands of these industries. Often these conflicts result in compromised health and safety; one example being decreased highway safety with farm equipment and cars competing on rural roads. The crucial economic, environmental and open space benefits of agriculture and forestry are compromised by such development. We oppose the creation of isolated development areas that are inefficient in terms of the full range of public facilities and services funded with public dollars. Public investments in areas such as this are best directed to agricultural and forestry preservation.

<u>Section 1.</u> Chapter 99, Code of Sussex Section 99-6 may also apply to this subdivision. The applicant should verify the applicability of this provision with Sussex County. This Section of the Code states:

G. Agricultural Use Protections.

(1) Normal agricultural uses and activities conducted in a lawful manner are preferred. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations, land uses adjacent to land used primarily for agricultural purposes shall be subject to the following restrictions:

(a) For any new subdivision development located in whole or in part within three hundred (300) feet of the boundary of land used primarily for agricultural purposes, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

"This property is located in the vicinity of land used primarily for agricultural purposes on which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities."

(b) For any new subdivision development located in whole or in part within fifty (50) feet of the boundary of land used primarily for agricultural purposes no improvement requiring and occupancy approval for a residential type use shall be constructed within fifty (50) feet of the boundary of land used primarily for agricultural purposes.

The developer should also coordinate with Sussex County to ensure their project is in compliance with the County's forested buffer requirements.

Additionally, this site overlaps with the State's Green Infrastructure Investment Strategy Plan. The Crop Land layer is present on this site; this designation identifies areas of the state that are viable and valuable cropland which should be preserved.

The Delaware Department of Agriculture supports growth which expands and builds on existing urban areas and growth zones in approved State, county and local plans. Where additional land preservation can occur through the use of transfer of development rights, and other land use measures, we will support these efforts and work with developers to implement these measures. If this project is approved we will work with the developers to minimize impacts to the agricultural and forestry industries.

Right Tree for the Right Place

The Delaware Department of Agriculture Forest Service encourages the developer to use the "Right Tree for the Right Place" for any design considerations. This concept allows for the proper placement of trees to increase property values in upwards of 25% of PLUS 2007-11-06 Page 18 of 21

appraised value and will reduce heating and cooling costs on average by 20 to 35 dollars per month. In addition, a landscape design that encompasses this approach will avoid future maintenance cost to the property owner and ensure a lasting forest resource.

Do Not Plant List

Due to the high risk of mortality from insects and disease, the Delaware Forest Service does not recommend planting any of the following species:

Callery Pear Leyland Cypress Red Oak (except for Willow Oak) Ash Trees

Please contact the Delaware Forest Service for more information at (302) 698-4500.

Native Landscapes

The Delaware Department of Agriculture and the Delaware Forest Service encourages the developer to use native trees and shrubs to buffer the property from the adjacent landuse activities near this site. A properly designed forested buffer can create wildlife habitat corridors and improve air quality to the area by removing six to eight tons of carbon dioxide annually and will clean our rivers and creeks of storm-water run-off pollutants. To learn more about acceptable native trees and how to avoid plants considered invasive to our local landscapes, please contact the Delaware Department of Agriculture Plant Industry Section at (302) 698-4500.

Public Service Commission - Contact: Andrea Maucher 739-4247

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines. Contact: Malak Michael at (302) 739-4247.

Delaware State Housing Authority – Contact Vicki Powers 739-4263

This proposal is for a site plan review of 110 residential units on 55.2 acres located on Bayard Road, approximately 1,800 ft. northwest of Zion Church Road, near Selbyville. According to the *State Strategies Map*, the proposal is located in an Investment Level 4 area. As a general planning practice, DSHA encourages residential development only in areas where residents will have proximity to services, markets, and employment opportunities, such as Investment Level 1 and 2 areas outlined in the State Strategies Map. Since the proposal is located in an area targeted for agricultural and natural

resource protection, and therefore inconsistent with where the State would like to see new residential development, DSHA does not support this proposal.

<u>Department of Education - Contact: John Marinucci 735-4055</u>

DOE recognizes that this development project is in level 4 of the State Strategies for Policies and Spending and as such, DOE does not support the approval of this project.

This proposed development is within the Indian River School District boundaries. DOE offers the following comments on behalf of the Indian River School District.

- 1. Using the DOE standard formula, this development will generate an estimated 55 students.
- 2. DOE records indicate that the Indian River School Districts' *elementary schools* are at or beyond 100% of current capacity based on September 30, 2007 elementary enrollment.
- 3. DOE records indicate that the Indian River School Districts' *secondary schools are not at or beyond* 100% *of current capacity* based on September 30, 2007 secondary enrollment.
- 4. In multiple correspondences from the Indian River School District administration, the district asserts that while the Indian River High Schools have capacity, the Indian River Middle Schools' student population exceeds student capacity.
- 5. This development will create additional elementary school and middle school student population growth which will further compound the existing shortage of space. The developer is strongly encouraged to contact the Indian River School District Administration to address the issue of elementary and middle school over-crowding that this development will exacerbate.
- 6. DOE requests developer work with the Indian River School District transportation department to establish developer supplied bus stop shelter ROW and shelter structures, interspersed throughout the development as determined and recommended by the local school district.
- 7. *Cautionary Note:* Reviewer noticed a "Tot Lot" identified on the development plan. If the developer is planning to install public use playground equipment and turn it over to the HOA for ultimate control and maintenance, that playground equipment should be installed and maintained in accordance with ASTM Designation F-1487 and CPSC PUB 325 to reduce developer liability for playground injuries.

Sussex County – Contact: Richard Kautz 855-7878

Because this project is an AR-1 Cluster subdivision and partially within the ESDA, the developer must include in the application a plan for the management of all open space. Also, the developer must document for the Planning and Zoning Commission how the proposed development: provides for a total environment and design which are superior to that which would be allowed under the standard lot option; preserves the natural environment and historic or archeological resources; and, will not have an adverse effect on any of the items included under Ordinance Number 1152 (County Code 99-9C). For example, the reduction of _____ lots from 20,000 sq. ft. to an average lot size of 9,900 sq. ft. allows for more than 25 acres of open space yet only 20 acres of "useable" open space is provided. As a result, at least 23 of the lots do not have direct access to open space. The remaining open space is that which would otherwise be required with or without the clustering (i.e. stormwater management, buffers, and utilities). These issues can be addressed by including in the County application an explanation of how the developer plans to mitigate them and the issues raised by the State agencies during this review.

The State Wetlands map indicates the possibility of wetlands impacting the location of proposed subdivision lots and roads. Therefore a jurisdictional determination letter should be provided to support the proposed design for that area and that the lot layout does not contain any wetlands. This letter should be obtained prior to the request for approval of any final plan.

The Sussex County Engineer Comments:

The project proposes 75 residential units on 34 acres, which results in a density of 2.2 EDUs per acre. The number of units is within the allocation based on the South Coastal Area Planning Study, Update 2005. The proposed project is within the boundaries of the Johnson's Corner Sanitary Sewer District (JCSSD) and connection to the system is mandatory. A referendum was held on July 21, 2007 to determine if the district would be established. Area residents were in favor of the sewer district and approved the referendum. The preliminary schedule indicates sewer service could become available to the area as early as the summer of 2010. The developer will be required to complete or participate in offsite sewer construction and upgrades, at the developer's expense. Developers could install off-site infrastructure to an approved connection point to expedite service. Conformity to the South Coastal Area Planning Study 2005 Update and the Johnson's Corner Sanitary Sewer District Preliminary Engineering Report will be required.

Sussex County requires design and construction of the collection and transmission system to meet Sussex County Engineering Department's sewer standards and specifications. The Sussex County Engineer must approve the connection point. A sewer concept plan

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must be reviewed and approved prior to any sewer construction. A checklist for preparing sewer concept plans was handed to the applicant at the PLUS meeting. Also, please note system connection charges will be required. Please contact Mrs. Christine Fletcher at 302 854-5086 for additional information on charges.

For questions regarding these comments, contact Rob Davis, Sussex County Engineering Department

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

Constance C. Holland, AICP

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Director

CC: Sussex County